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FOR USE WITH UNIDEN SCANNERS

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<BC780XLT-VA1 OPERATION SPECIFICATION>

1.1.REMOTE COMMAND (Ver1.03)

【Remote Communication Format】

BPS rate : 2400/4800/9600/19200 bps(default :9600 bps)
Start/Stop bit : 1 bit, 1 bit
Data Length : 8 bit
Parity Check : None
Code : ASCII
Flow Control : None
Return Code : Carriage Return only

*1 In case of controlling with program, insert waiting time between commands.
*2 On MEMU mode, Only key emulation commands is valid.
*3 The command to change the scanner setting may change an setup item except for the applicable setup item, too.
Most of these commands depend on the specifications of your Scanner.
Ex) “PM” command or “PR” command

【FORMAT OF THIS DOCUMENT】

<COMMAND NAME>
Summary explanation of the function of the command

Controller → Radio
Command format
Radio → Controller
Response format

※ Error message isn't described in this document,
but the unit sends error message to the controller as follows.
1)Command format error / Value error : ERR[¥r]
2)The command is invalid at the time : NG[¥r]
3)Flaming error : FER[¥r]
4)Overrun error : ORER[¥r]

※ [¥r] means "to hit the Enter key" or "to send the Return code".
※ The ch bank or search No. assign to alphabet.
Ex) BANK1 :A BANK2 :B ---- BANK10 :J
※ The id list No. assign to alphabet.
Ex) LIST1 :A LIST2 :B ---- LIST10 :J

==

<COMMAND AC>

Clear(Initialize) all memory.

==

Controller → Radio

AC[¥r]

Radio → Controller

OK[¥r]

This command instructs the unit to clear all the memories.
All the memories are set for initial setting
This command is valid at any time.

Note)There needs about 10 seconds execute time.

Start from Channel Scanning(start channel: CH 1) by initial setting.

==

<COMMAND AF>

Confirm/Set EDACS AFS(Agency, Fleet, SUBFLEET) to DECIMAL ID Form mode ON/OFF .

==

Controller → Radio

① AF[¥r] :Confirm AFS to DECIMAL ID Form mode ON/OFF
② AFN[¥r] :AFS to DECIMAL ID Form mode ON
AFF[¥r] :AFS to DECIMAL ID Form mode OFF

Radio → Controller

① AFN[¥r] :AFS to DECIMAL ID Form mode ON
AFF[¥r] :AFS to DECIMAL ID Form mode OFF
② OK[¥r]

This command instructs the unit to turn or confirm AFS ID function ON/OFF.

==

<COMMAND AL> Not Support

Confirm/Set Auto Light function ON/OFF .

==

Controller → Radio

① AL[¥r] : Confirm Frequency Identification function ON/OFF

② ALN[¥r] : Auto Light function ON

ALF[¥r] : Auto Light function OFF

Radio → Controller

① ALN[¥r] :Auto Light ON / ALF[¥r] : Auto Light OFF

② OK[¥r]

This command instructs the unit to turn or confirm Auto Light function ON/OFF.

==

<COMMAND AR>

Confirm/set Tape out recording function ON/OFF

==

Controller → Radio

① AR[¥r] :Confirm TAPE OUT recording Function ON/OFF

② ARN[¥r] :TAPE OUT recording Function ON

ARF[¥r] :TAPE OUT recording Function OFF

Radio → Controller

① ARN[¥r] :TAPE OUT recording Function ON

ARF[¥r] :TAPE OUT recording Function OFF

② OK[¥r]

==

<COMMAND AT>

Confirm/Set ATT function ON/OFF .

==

Controller → Radio

① AT[¥r] :Confirm ATT function ON/OFF

② ATN[¥r] :ATT ON

ATF[¥r] :ATT OFF

Radio → Controller

① ATN[¥r] :ATT ON

ATF[¥r] :ATT OFF

② OK[¥r]

This command instructs the unit to turn or confirm ATT function ON/OFF.

==

<COMMAND BA>

Confirm/Set BEEP ALERT feature ON/OFF .

==

Controller → Radio

① Confirm BEEP ALERT ON or OFF

BA C ###[¥r] :Confirm BEEP ALERT ON/OFF for Channel of the memory
###:Channel No.(001 - 500)

BA I $ &%[¥r] :Confirm BEEP ALERT ON/OFF for TALK GROUP ID
$ &%:ID Memory No.
$:Bank No. (A-J)
&:List No. (A-J)
%:Location No. (1-9,0) Note "0" is Location No.10

② Set BEEP ALERT

BAN C ###[¥r] :Set BEEP ALERT to ON for the Channel memory

BAF C ###[¥r] :Set BEEP ALERT to OFF for the Channel memory
###:channel No.(001 - 500)

BAN I $ &%[¥r] :Set BEEP ALERT to ON for the ID memory

BAF I $ &%[¥r] :Set BEEP ALERT to OFF for the ID memory
$ &%:ID Memory No.
$:Bank No. (A-J)
&:List No. (A-J)
%:Location No. (1-9,0) Note "0" is Location No.10

③ ON/OFF function which informs ALERT condition when "BEEP ALERT" assigned signal is received or "BEEP ALERT" assigned Talk ID is reception

BAN[¥r] :The function which informs ALERT condition is ON

BAF[¥r] :The function which informs ALERT condition is OFF

④ Confirm the function which informs BEEP ALERT condition is ON/OFF

BA[¥r]

Radio → Controller

① BAN C ###[¥r] :BEEP ALERT of the Channel memory is ON
BAF C ###[¥r] :BEEP ALERT of the Channel memory is OFF
###:Channel No.(001 - 500)
BAN I $ &%[¥r] :BEEP ALERT of the ID memory is ON
BAF I $ &%[¥r] :BEEP ALERT of the ID memory is OFF
$ &%:ID Memory No.
$:Bank No. (A-J)
&:List No. (A-J)
%:Location No. (1-9,0) Note "0" is Location No.10

② OK[¥r]

③ Informs when BEEP ALERT is sounded
BEEP ALERT OUT[¥r]

④ Informs the BEEP ALERT function ON/OFF condition
BAN[¥r] :The function which informs ALERT condition is ON
BAF[¥r] :The function which informs ALERT condition is OFF

==

<COMMAND BP>

Confirm/Set BEEP output enable or disable .

==

Controller → Radio

① BP[¥r] :Confirm BEEP output enable or disable
② BPN[¥r] :Set BEEP output to enable
BPF[¥r] :Set BEEP output to disable

Radio → Controller

① BPN[¥r] :BEEP is enable
BPF[¥r] :BEEP is disable
② OK[¥r] :Command OK

==

<COMMAND BT>

Confirm/Set S-BIT function ON/OFF .

==

Controller → Radio

① BT[¥r] :Confirm S-BIT function ON/OFF
② BTN[¥r] :S-BIT ON
BTF[¥r] :S-BIT OFF

Radio → Controller

① BTN[¥r] :S-BIT ON

BTF[¥r] :S-BIT OFF

② OK[¥r]

This command instructs the unit to turn or confirm S-BIT function ON/OFF.

==

<COMMAND CB>

Confirm/Select Chain search Banks.

==

Controller → Radio

①CB[¥r] :Confirm search banks

②CB @%○･･･[¥r] :Select Search banks

@,%,○,･･･ :bank name

<Example>

CB ACEGI[¥r]

Select "BANK A, C, E, G, I".

Radio → Controller

①､② CB @%○･･･[¥r] @,%,○,･･･ :bank name

<Example>

CB ACEGI[¥r] Selected search banks are "BANK A, C, E, G, I".

This command instructs the unit to make designated search banks be selected.

If your select bank is not any frequency programmed, the bank will be ignored.

==

<COMMAND CC>

Confirm CTCSS/DCS decode condition

==

Controller → Radio

① CC[¥r] :Confirm CTCSS/DCS decode condition

Radio → Controller

①CCY[¥r] :Decode OK / CCN[¥r] : decode NG

==

<COMMAND CD>

Informs when CTCSS/DCS is decoded

==

Controller → Radio

① CD[¥r] : Confirm CD command active or not

② CDN[¥r] : CD ON / CDF[¥r] : CD OFF

Radio → Controller

①CDN[¥r] or CDF[¥r]

② OK[¥r]

While the function is ON, if CTCSS/DCS is detected, the unit sends its CTCSS/DCS No. to the controller in the form of CD###[¥r].

###: CTCSS/DCS No. are listed in Table(following end of this chapter)

==

<COMMAND CS>

Confirm/set CTCSS/DCS

==

Controller → Radio

① CS[¥r] :Confirm CTCSS/DCS No.

② CS###[¥r] :Set CTCSS/DCS No.

Example)

CS001[¥r] : Set 67.0Hz ctcss tone

CS000[¥r] : Clear CTCSS/DCS

③ CS###L[¥r] :Set tone locked CTCSS/DCS No.

###: CTCSS/DCS No. are listed in Table (following end of this chapter)

Radio → Controller

① CS###[¥r] : ###:CTCSS/DCS No.

CS###L[¥r] : ###:tone locked CTCSS/DCS No.

② OK[¥r]

③ OK[¥r]

==

<COMMAND CT>

Confirm/set CTCSS/DCS function ON or OFF

==

Controller → Radio

① CT[¥r] :Confirm CTCSS/DCS function ON or OFF

② CTN[¥r] :CTCSS/DCS ON CTF[¥r] CTCSS/DCS OFF

CTS[¥r] :CTCSS/DCS SEARCH ON

Radio → Controller

①CTN[¥r] :CTCSS/DCS ON CTF[¥r] CTCSS/DCS OFF

CTS[¥r] :CTCSS/DCS SEARCH ON

②OK[¥r]

==

<COMMAND DL>

Confirm/Set DELAY function ON/OFF.

==

Controller → Radio

① DL[¥r] :Confirm DELAY function ON/OFF

② DLN[¥r] :2seconds delay ON

DLF[¥r] :Delay OFF

DLN ###[¥r] :Optional deley ON

: delay timer setting

+1,+2,+4,+-,-2,-5,-10 NOTE) +- :INFINITY

<Example> DLN +2[¥r]

Radio → Controller

① DL ###[¥r] :Delay ON

: delay timer setting

+1,+2,+4,+-,-2,-5,-10 NOTE) +- :INFINITY

DLF[¥r] :Delay OFF

② OK[¥r]

This command instructs the unit to turn or confirm DELAY function ON/OFF.

==

<COMMAND DS>

Confirm/Set DATA SKIP function ON/OFF .

==

Controller → Radio

① DS[¥r] :Confirm DATA SKIP function ON/OFF

② DSN[¥r] :Data skip ON

DSF[¥r] :Data skip OFF

Radio → Controller

① DSN[¥r] :Data skip ON

DSF[¥r] :Data skip OFF

② OK[¥r]

This command instructs the unit to turn or confirm DATA SKIP function ON/OFF.

==

<COMMAND EL>

Confirm/Set Enter Lock feature ON/OFF .

==

Controller → Radio

① EL[¥r] :Confirm ENTER LOCK ON/OFF

② ELN[¥r] :Set ENTER LOCK to ON

ELF[¥r] :Set ENTER LOCK to OFF

Radio → Controller

① ELN[¥r] :ENTER LOCK is ON

ELF[¥r] :ENTER LOCK is OFF

② OK[¥r] :Command OK

==

<COMMAND FB>

Confirm/Program fleet block on scanner.

==

Controller → Radio

① FB & #[¥r] :Confirm Fleet Block size.

& :A-J Identifies the bank for this fleet block.

:0-7 Identifies the Fleet map Block No.

② FB & # %%[¥r] :Program Fleet Block No
& :A-J Identifies the bank for this Fleet Block.
:0-7 Identifies the Fleet map Block No.
%% :00-14 Block size indicator.

Radio → Controller

① FB & # %%[¥r] :Programmed fleet Block size.
& :A-J Identifies the bank for this fleet block.
:0-7 Identifies the Fleet map block No.
%% :00-14 Block size indicator.

② OK[¥r]

==

<COMMAND FI> Not Support

Confirm/Set Frequency Identification function ON/OFF .

==

Controller → Radio

① FI[¥r] :Confirm Frequency Identification function ON/OFF

② FIN[¥r] :Frequency Identification ON
FIF[¥r] :Frequency Identification OFF

Radio → Controller

① FIN[¥r] :ON
FIF[¥r] :OFF

② OK[¥r]

This command instructs the unit to turn or confirm Frequency Identification function ON/OFF.

==

<COMMAND FP>

Confirm/ Program FIPS code / Enable All FIPS code mode

==

Controller → Radio

① FP[¥r] :Confirm FIPS code disable or enable

② FP $$ ######[¥r] :Program FIPS code
FP $$ 0[¥r] :Clear FIPS code
$$:Fips code List No.(01-15)
:Fips code No.(6digit)

③ FP $$[¥r] :Confirm FIPS code of the optional List No.

$$:Fips code List No.(01-15)

④ FPN[¥r] :Enable All FIPS code mode

FPF[¥r] :Disable All FIPS code mode

Radio → Controller

① FPN[¥r] :Enable All FIPS code mode

FPF[¥r] :Disable All FIPS code mode

② OK[¥r] :Command OK

③ FIPS $$ ######[¥r] :Informs Fips code No.

$$:Fips code List No.(01-15)

:Fips code No.(6digit) or "------":not programmed

④OK[¥r] :Command OK

==

<COMMAND IC>

Confirm/Move/Program ID Memory No.

==

Controller → Radio

① Confirm

IC[¥r]

② Move ID memory

IC @%[¥r] @ :ID Scan list (A-J)

% :ID Location (1-9,0)

"0" is used to indicate "ID Location 10".

<Example>

IC A0[¥r]

Move ID Memory No. to "ID Scan List A" and "ID Location 10".

③ Program Talk Group ID

//// **MOTOROLA TYPE1** ////

IC @% &##-$$[¥r] or IC @% &###-$[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

&##-$$: Type1 ID

& :Block No.(0-9)

or ### :Fleet No.

$$:Sub fleet No.

<Example>

IC A0 001-05[¥r] ID in ID memory "A10" is

"BLOCK=0, FLEET=1, SUBFLEET=5".

>> PROGRAM MOTOROLA TYPE1 I-CALL ID <<

IC @% i#####[¥r]

@% :ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i##### :I-CALL ID

<Example>

IC A0 i01234[¥r]   ID in ID memory "A10" is "i01234".

>> PROGRAM MOTOROLA TYPE1 ALL I-CALL ID <<

IC @% i0[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i0 : ALL I-CALL ID Indication

//// **MOTOROLA TYPE 2** ////

IC @% ######[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

: Type2 ID

<Example>

IC A0 001234[¥r] ID in ID memory "A10" is "1234".

>> PROGRAM MOTOROLA TYPE2 I-CALL ID <<

IC @% 7#####[¥r]

@% :ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

7##### :I-CALL ID

<Example>

IC A0 701234[¥r]   ID in ID memory "A10" is "701234".

>> PROGRAM MOTOROLA TYPE2 ALL I-CALL ID <<

IC @% 700000 or IC @% i0[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

700000 /i0 : ALL I-CALL ID Indication

//// LTR ////

IC @% %$$###[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
%$$### : LTR Talk Group ID
% :Area code(0,1)
$$:Home Repeater No. (01-20)
:ID(000-254)
<Example>
IC A0 001064[¥r]
ID in ID memory "A10" is "Area code:0 Home Repeater No.:01 ID:64"

//// EDACS ////

IC @% &&-##$[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
&&-##$: Edacs Talk Group ID
&& :Agency No. ## :Fleet No. $:SUBFLEET No.
<Example>
IC A0 01-025[¥r] AFS format
IC A0 000149[¥r] DECIMAL format
ID in ID memory "A10" is "AGENCY=01, FLEET=02, SUBFLEET=5"

>> PROGRAM EDACS PARTIAL ID <<
IC @% &&-[¥r] or IC @% &&-##[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
&&-: Edacs Partial Talk Group ID(All Agency)
&&-##: Edacs Partial Talk Group ID(All Agency-Fleet)
&& :Agency No. ## :Fleet No.
<Example>
IC A0 01-[¥r]
IC A0 01-02[¥r]

>> PROGRAM EDACS I-CALL ID <<
IC @% i#####[¥r]
@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)
i##### :I-CALL ID
<Example>
IC A0 i01234[¥r]   ID in ID memory "A10" is "i01234".

>> PROGRAM EDACS ALL I-CALL ID <<

IC @% i0[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
i0 : ALL I-CALL ID Indication

Radio → Controller
①,②
//// **Not Programmed ID** ////

IC @% ------[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)

//// **MOTOROLA TYPE1** ////

IC @% &##-$$[¥r] or IC @% &###-$[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
&##-$$: Type1 ID
& :Block No.(0-9)
or ### :Fleet No.
$$:Sub fleet No.
<Example>
IC A0 001-05[¥r]   ID in ID memory "A10" is
"BLOCK=0, FLEET=1, SUBFLEET=5".

>> MOTOROLA TYPE1 I-CALL ID <<
IC @% i#####[¥r]
@% :ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
i##### :I-CALL ID
<Example>
IC A0 i01234[¥r]   ID in ID memory "A10" is "i01234".

>> MOTOROLA TYPE1 ALL I-CALL ID <<

IC @% i00000[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
i00000 : ALL I-CALL ID Indication

//// **MOTOROLA TYPE 2** ////

IC @% ######[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
: Type2 ID
<Example>
IC A0 001234[¥r] ID in ID memory "A10" is "1234".

>> MOTOROLA TYPE2 I-CALL ID <<

IC @% 7#####[¥r]
@% :ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
7##### :I-CALL ID
<Example>
IC A0 701234[¥r]   ID in ID memory "A10" is "701234".

>> MOTOROLA TYPE2 ALL I-CALL ID <<

IC @% 700000[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
700000 : ALL I-CALL ID Indication

//// **LTR** ////

IC @% %$$###[¥r]
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
%$$### : LTR Talk Group ID
% :Area code(0,1)
$$:Home Repeater No. (01-20)

:ID(000-254)

<Example>

IC A0 001064[¥r]

ID in ID memory "A10" is "Area code:0 Home Repeater No.:01 ID:64"

//// EDACS ////

IC @% &&-##$[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

&&-##$: Edacs Talk Group ID

&& :Agency No. ## :Fleet No. $:SUBFLEET No.

<Example>

IC A0 01-025[¥r] AFS format

IC A0 000149[¥r] DECIMAL format

ID in ID memory "A10" is "AGENCY=01, FLEET=02, SUBFLEET=5"

>> EDACS PARTIAL ID <<

IC @% &&----[¥r]or IC @% &&-##-[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

&&----: Edacs Partial Talk Group ID(All Agency)

&&-##-: Edacs Partial Talk Group ID(All Agency-Fleet)

&& :Agency No. ## :Fleet No.

<Example>

IC A0 01----[¥r]

IC A0 01-02-[¥r]

>> EDACS I-CALL ID <<

IC @% i#####[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i##### :I-CALL ID

<Example>

IC A0 i01234[¥r] ID in ID memory "A10" is "i01234".

>> EDACS ALL I-CALL ID <<

IC @% i00000[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i00000 : ALL I-CALL ID Indication

③ OK[¥r]

==

<COMMAND ID>

ON/OFF function which informs when ID reception starts or ends.

==

Controller → Radio

① ID[¥r] : confirm "ID" command active

② IDN[¥r] : "ID" command ON

IDF[¥r] : "ID" command OFF

Radio → Controller

① IDN[¥r] : "ID" command ON

IDF[¥r] : "ID" command OFF

② OK[¥r]

While the function is ON, the reception ID and tuned frequency are returned by the following format when a radio receives ID and when the reception of ID is finished.

(1)ID Reception Starts

//// **MOTOROLA TYPE1** ////

ID S &##-$$ %%%%%%%%[¥r] or ID S &###-$ %%%%%%%%[¥r]

&##-&& / &###-$:Motorola Type1 ID

& :Block No. ## / ### :Fleet No.

$$ / $:Subfleet No.

%%%%%%%% :Voice channel Frequency

<Example>

ID S 001-03 08510125[¥r]

ID reception starts on Block=0、Fleet=1, Subfleet=3

Voice channel Frequency: 851.0125MHz

>> MOTOROLA TYPE1 I-CALL ID RECEPTION START <<

ID S i##### %%%%%%%% I-CALL i$$$$$[¥r]

i##### :Individual Call ID1(Decimal format)
i$$$$$:Individual Call ID2(Decimal format)
%%%%%%%% :Voice channel Frequency

>> MOTOROLA TYPE1 PHONE CALL ID RECEPTION START <<

ID S i##### %%%%%%%% PHONE[¥r]

i##### :Phone Call ID(Decimal format)
%%%%%%%% :Voice channel Frequency

//// **MOTOROLA TYPE 2** ////

ID S @@@@@@ %%%%%%%%[¥r]

@@@@@@ :Talk group ID
%%%%%%%% :Voice channel Frequency

<Example>

ID S 001234 08510125[¥r] ID reception starts on "ID=1234".
Voice Channel Frequency:851.0125MHz

>> MOTOROLA TYPE2 I-CALL ID RECEPTION START <<

ID S 7##### %%%%%%%% I-CALL 7$$$$$[¥r]

7##### :Individual Call ID1(Decimal format)
7$$$$$:Individual Call ID2(Decimal format)
%%%%%%%% :Voice channel Frequency

>> MOTOROLA TYPE2 PHONE CALL ID RECEPTION START <<

ID S 7##### %%%%%%%% PHONE[¥r]

7##### :Phone Call ID(Decimal format)
%%%%%%%% :Voice Frequency

//// **LTR** ////

ID S %$$### %%%%%%%%[¥r]

%$$### : LTR Talk Group ID
% :Area code(0,1)

$$:Home Repeater No. (01-20)
:ID(000-254)
%%%%%%%% :Goto channel Frequency

<Example>
ID S 001064 08510250[¥r]
ID reception starts on "Area code:0 Home Repeater No.:01 ID:64".
Goto Channel Frequency:851.0250MHz

//// **EDACS** ////

ID S &&-##$ %%%%%%%%[¥r]

&&-##$:EDACS Talk Group ID
&& :Agency ## :Fleet No. $:SUBFLEET No.
%%%%%%%% :Working channel Frequency

<Example>
ID S 01-025 08510125[¥r] AFS format
ID S 000149 08510125[¥r] DECIMAL format

>> EDACS EMERGENCY ID RECEPTION START <<

ID S &&-##$ %%%%%%%% EMERGENCY[¥r]

&&-##$:EDACS Emergency ID
&& :Agency ## :Fleet No. $:SUBFLEET No.
%%%%%%%% :Working channel Frequency

>> EDACS PATCH CALL ID RECEPTION START <<

ID S &&-##$ %%%%%%%% PATCH ID @@-¥¥# @@-¥¥# @@-¥¥#[¥r]

&&-##$:EDACS Patch ID
&& :Agency ## :Fleet No. $:SUBFLEET No.
%%%%%%%% :Working channel Frequency
@@-¥¥# :Patch comprising talk groups ID
@@ :Agency ¥¥ :Fleet No. # :SUBFLEET No.

>> EDACS I-CALL ID RECEPTION START <<

ID S i##### %%%%%%%% I-CALL[¥r]

i##### :EDACS I-CALL ID(Decimal format)
%%%%%%%% :Working channel Frequency

(2)ID reception ends

//// **MOTOROLA TYPE1** ////

ID E &##-$$ %%%%%%%%[¥r] or ID E &###-$ %%%%%%%%[¥r]

&##-&& / &###-$:Motorola Type1 ID
& :Block No. ## / ### :Fleet No.
$$ / $:Subfleet No.
%%%%%%%% :Control channel Frequency

<Example>

ID E 001-03 08510125[¥r]   ID reception ends on Block=0、
Fleet=1, Subfleet=3
Control channel Frequency:851.0125MHz

>> MOTOROLA TYPE1 I-CALL & PHONE CALL RECEPTION END <<

ID E i##### %%%%%%%%[¥r]

i##### :ID(Decimal format)
%%%%%%%% :Control channel Frequency

//// **MOTOROLA TYPE2** ////

ID E @@@@@@ %%%%%%%%[¥r]

@@@@@@ :Talk group ID
%%%%%%%% :Control channel Frequency

<Example>

ID E 001234 08510125[¥r]   ID reception ends on "ID=1234".
Control channel Frequency:851.0125MHz

>> MOTOROLA TYPE2 I-CALL & PHONE CALL ID RECEPTION END <<

ID E 7##### %%%%%%%%[¥r]

7##### :ID(Decimal format)
%%%%%%%% :Control channel Frequency

//// LTR ////

ID E %$$### %%%%%%%%[¥r]
%$$### : LTR Talk Group ID
% :Area code(0,1)
$$:Home Repeater No. (01-20)
:ID(000-254)
%%%%%%%% :Home channel Frequency

<Example>
ID E 001064 08510250[¥r]
ID reception ends on "Area code:0 Home Repeater No.:01 ID:64".
Home Channel Frequency:851.0250MHz

//// EDACS ////

ID E &&-##$ %%%%%%%%[¥r]
&&-##$:EDACS Talk Group ID
&&:Agency ##:Fleet No. $: SUBFLEET No.
%%%%%%%% :Control channel Frequency

<Example>
ID E 01-025 08510125[¥r] AFS format
ID E 000149 08510125[¥r] DECIMAL format

>> EDACS EMERGENCY ID RECEPTION END <<

ID E &&-##$ %%%%%%%%[¥r]

&&-##$:EDACS Emergency ID
&&:Agency ##:Fleet No. $: SUBFLEET No.
%%%%%%%% :Control channel Frequency

>> EDACS PATCH CALL ID RECEPTION END <<

ID E &&-##$ %%%%%%%%[¥r]
&&-##$:EDACS Patch ID

&&:Agency ##:Fleet No. $: SUBFLEET No.
%%%%%%%% :Control channel Frequency

>> EDACS I-CALL ID RECEPTION END <<

ID E i##### %%%%%%%%[¥r]
i##### :EDACS I-CALL ID(Decimal format)
%%%%%%%% :Control channel Frequency

This command instructs the unit to turn the function ON/OFF.
While the function is ON, the unit is monitoring the status of
the ID reception and informs when it starts or ends.

==

<COMMAND IL>
Read L/O ID memory.
Register an ID into L/O ID memory.
Delete an ID from L/O ID memory.

==

Controller → Radio

① Read

IL###[¥r] ### : Lockout Memory No.(001 - 200)

② Register

//// **MOTOROLA TYPE 1** ////

ILR &##-$$[¥r] / ILR &###-$[¥r]

&##-&& / &###-$:Motorola Type1 ID
& :Block No. ## / ### :Fleet No.
$$ / $:Subfleet No.

ILR i#####[¥r] i##### :MOTOROLA TYPE1 I-CALL ID

<Example>

ILR 001-03[¥r]
ILR i01234[¥r]

//// **MOTOROLA TYPE 2** ////

ILR @@@@@@[¥r] @@@@@@ :MOTOROLA TYPE2
ILR 7#####[¥r] 7##### :MOTOROLA TYPE2 2 I-CALL ID

<Example>

ILR 024106[¥r]
ILR 701234[¥r]

//// **LTR** ////

ILR %$$###[¥r]
%$$### : LTR Talk Group ID
% :Area code(0,1)
$$:Home Repeater No. (01-20)
:ID(000-254)

<Example>
ILR 001064[¥r]

//// **EDACS** ////

ILR &&-##$[¥r]
&&-##$:EDACS Emergency ID
&&:Agency ##:Fleet No. $: SUBFLEET No.

ILR i#####[¥r] i##### :EDACS I-CALL ID

<Example>
ILR 01-011[¥r]
ILR i01234[¥r]

>> EDACS BLOCKOUT <<

ILR &&-[¥r] ALL Agency lockout &&: Agency No
ILR &&-##[¥r] ALL Agency-Fleet lockout ##: Fleet No.

<Example>
ILR 02-[¥r]
ILR 02-01[¥r]

③ Delete

//// **MOTOROLA TYPE 1** ////

ILD &##-$$[¥r] / ILD &###-$[¥r]

&##-&& / &###-$:Motorola Type1 ID
& :Block No. ## / ### :Fleet No.
$$ / $:Subfleet No.

ILD i#####[¥r] i##### :MOTOROLA TYPE1 I-CALL ID

<Example>
ILD 001-03[¥r]

ILD i01234[¥r]

//// **MOTOROLA TYPE 2** ////

ILD @@@@@@[¥r] @@@@@@ :MOTOROLA TYPE2

ILD 7#####[¥r] 7##### :MOTOROLA TYPE2 2 I-CALL ID

<Example>

ILD 024106[¥r]

ILD 701234[¥r]

//// **LTR** ////

ILD %$$###[¥r]

%$$### : LTR Talk Group ID

% :Area code(0,1)

$$:Home Repeater No. (01-20)

:ID(000-254)

<Example>

ILD 001064[¥r]

//// **EDACS** ////

ILD &&-##$[¥r]

&&-##$:EDACS Emergency ID

&&:Agency ##:Fleet No. $: SUBFLEET No.

ILD i#####[¥r] i##### :EDACS I-CALL ID

<Example>

ILD 01-011[¥r]

ILD i01234[¥r]

>> EDACS BLOCKOUT <<

ILD &&-[¥r] ALL Agency lockout &&: Agency No

ILD &&-##[¥r] ALL Agency-Fleet lockout ##: Fleet No.

<Example>

ILD 02-[¥r]

ILD 02-01[¥r]

Radio → Controller

① Read

///// **NOT REGISTERED LOCKOUT ID MEMORY** /////

IL ------[¥r]

//// **MOTOROLA TYPE 1** ////

IL &##-$$[¥r] / IL &###-$[¥r]

&##-&& / &###-$:Motorola Type1 ID

& :Block No. ## / ### :Fleet No.

$$ / $:Subfleet No.

IL i#####[¥r] i##### :MOTOROLA TYPE1 I-CALL ID

<Example>

IL 001-03[¥r]

IL i01234[¥r]

//// **MOTOROLA TYPE 2** ////

IL @@@@@@[¥r] @@@@@@ :MOTOROLA TYPE2

IL 7#####[¥r] 7##### :MOTOROLA TYPE2 2 I-CALL ID

<Example>

IL 024106[¥r]

IL 701234[¥r]

//// **LTR** ////

IL %$$###[¥r]

%$$### : LTR Talk Group ID

% :Area code(0,1)

$$:Home Repeater No. (01-20)

:ID(000-254)

<Example>

IL 001064[¥r]

//// **EDACS** ////

IL &&-##$[¥r]

&&-##$:EDACS Emergency ID

&&:Agency ##:Fleet No. $: SUBFLEET No.

IL i#####[¥r]   i##### :EDACS I-CALL ID

<Example>

IL 01-011[¥r]

IL i01234[¥r]

>> EDACS BLOCKOUT <<

IL &&----[¥r]   ALL Agency lockout

ILD &&-##-[¥r] ALL Agency-Fleet lockout

&&:Agency ##:Fleet No.

<Example>

IL 02-[¥r]

IL 02-01-[¥r]

② Register

If the ID is registered into L/O ID memory, the unit sends OK[¥r] to the controller.

If the ID is already in L/O ID memory, sends ON[¥r].

If L/O ID memory is full, sends FULL[¥r].

③ Delete

If the ID is deleted from L/O ID memory, the unit sends OK[¥r] to the controller. If the ID isn't in L/O ID memory, sends OFF[¥r].

==

<COMMAND IR>

Confirm/Set I-call ID Reception function

==

Controller → Radio

① IR @[¥r]   :Confirm I-CALL ID Reception function

@:Bank No. (A-J)

② IRN @[¥r]   :Set I-CALL ID Reception to ON mode

IRF @[¥r]   :Set I-CALL ID Reception to OFF mode

IRY @[¥r]   :Set I-CALL ID Reception to ONLY mode

@:Bank No. (A-J)

Radio → Controller

① IRN @[¥r]   :I-CALL ID Reception is ON mode

IRF @[¥r]   :I-CALL ID Reception is OFF mode

IRY @[¥r] :I-CALL ID Reception is ONLY mode

@:Bank No. (A-J)

②OK[¥r]

==

<COMMAND IS>

Confirm/Select ID scan lists.

==

Controller → Radio

① IS[¥r] :Confirm ID scan list name

② IS @%○･･･[¥r] :Select ID scan list

@,%,○,･･･ :ID scan list No. (A-J)

<Example>

IS ACE[¥r] Select "LIST A, LIST C, LIST E".

(LIST B, LIST D are not selected)

Radio → Controller

①、②

IS @%○･･･[¥r] @,%,○,･･･ : ID scan list name

<Example>

IS ACE[¥r] Selected ID scan lists are "LIST A, C, E".

This command instructs the unit to make designated ID scan lists be selected.

==

<COMMAND KEY>

Work as if a key were pushed.

==

Controller → Radio

KEY○○[¥r]　　　○○:KEY Emulate Code (see Following Table)

* To indicate "Hold Press" of each key, add "H" to each command.

<Example>

KEY06H[¥r]

This command is used instead of hold press of [L/O] key.

KEY02 6[¥r]

This command is used instead of press of [6] key.

So this command is used instead of hold press of [6] key.

Radio → Controller

OK[¥r]

* When use [REMOTE] key, no response from the unit because this key makes the unit be out of REMOTE MODE. These commands instruct the unit to be have as if a key on the scanner's front panel were pushed.

* Even If the command is invalid, response is always OK.

Key Emulate Code:

KEY00: [SCAN]	KEY01: [MANUAL]
KEY02: [0]-[9]	KEY03: [.]
KEY04: [E/REM]	KEY05: [PRI]
KEY06: [L/O]	KEY07: [HOLD/▲]
KEY08: [LIMIT/▼]	KEY09: [SEARCH]
KEY10: [WX]	KEY11: [MENU]
KEY12: [SELECT]	KEY13: [TRUNK]
KEY14: [SELECT PUSH]	

==

<COMMAND LCD>

Confirm the icon indicated in LCD, a character, and so on.

==

Controller → Radio	Radio → Controller(+:ON -:OFF *:FLASH)		
LCD P[¥r] “P”icon is ON/OFF/FLASH ?	P +[¥r]	P -[¥r]	P *[¥r]
LCD E[¥r] “E”icon is ON or OFF(or FLASH)	E +[¥r]	E -[¥r]	E *[¥r]
LCD M[¥r] “M”icon is ON/OFF/FLASH ?	M +[¥r]	M -[¥r]	M *[¥r]
LCD L[¥r] “L”icon is ON/OFF/FLASH ?	L +[¥r]	L -[¥r]	L *[¥r]
LCD BANK[¥r] “BANK”icon is ON/OFF/FLASH ?	BANK +[¥r]	BANK -[¥r]	BANK *[¥r]
LCD LIST[¥r] “LIST”icon is ON/OFF/FLASH ?	LIST +[¥r]	LIST -[¥r]	LIST *[¥r]
LCD SCAN[¥r] “SCAN”icon is ON/OFF/FLASH ?	SCAN +[¥r]	SCAN -[¥r]	SCAN *[¥r]
LCD TRUNK[¥r] “TRUNK”icon is ON/OFF/FLASH ?	TRUNK +[¥r]	TRUNK -[¥r]	TRUNK *[¥r]
LCD FDOT[¥r] “.”of frequency is ON/OFF/FLASH ?	FDOT +[¥r]	FDOT -[¥r]	FDOT *[¥r]
LCD N[¥r] “N”icon is ON/OFF/FLASH ?	N +[¥r]	N -[¥r]	N *[¥r]
LCD DCS[¥r] “DCS”icon is ON/OFF/FLASH ?	DCS +[¥r]	DCS -[¥r]	DCS *[¥r]
LCD CTCSS[¥r] “CTCSS”icon is ON/OFF/FLASH ?	CTCSS +[¥r]	CTSCC -[¥r]	CTCSS *[¥r]
LCD AM[¥r] “AM”icon is ON/OFF/FLASH ?	AM +[¥r]	AM -[¥r]	AM *[¥r]
LCD FM[¥r] “FM”icon is ON/OFF/FLASH ?	FM +[¥r]	FM -[¥r]	FM *[¥r]
LCD WFM[¥r] “WFM”icon is ON/OFF/FLASH ?	WFM +[¥r]	WFM -[¥r]	WFM *[¥r]
LCD SRCH[¥r] “SRCH”icon is ON/OFF/FLASH ?	SRCH +[¥r]	SRCH -[¥r]	SRCH *[¥r]
LCD HOLD[¥r] HOLD”icon is ON/OFF/FLASH ?	HOLD +[¥r]	HOLD -[¥r]	HOLD *[¥r]
LCD FREQ[¥r] “FREQ”icon is ON/OFF/FLASH ?	FREQ +[¥r]	FREQ -[¥r]	FREQ *[¥r]
LCD CHAN[¥r] “CHAN”icon is ON/OFF/FLASH ?	CHAN +[¥r]	CHAN -[¥r]	CHAN *[¥r]
LCD PRI[¥r] “PRI”icon is ON/OFF/FLASH ?	PRI +[¥r]	PRI -[¥r]	PRI *[¥r]
LCD DLY[¥r] “DLY”icon is ON/OFF/FLASH ?	DLY +[¥r]	DLY -[¥r]	DLY *[¥r]
LCD LOUT[¥r] “L/O”icon is ON/OFF/FLASH ?	LOUT +[¥r]	LOUT -[¥r]	LOUT *[¥r]
LCD ALPHA[¥r] “ALPHA”icon is ON/OFF/FLASH ?	ALPHA +[¥r]	ALPHA -[¥r]	ALPHA *[¥r]
LCD RMT[¥r] “RMT”icon is ON/OFF/FLASH ?	RMT +[¥r]	RMT -[¥r]	RMT *[¥r]
LCD AUTO[¥r] “AUTO”icon is ON/OFF/FLASH ?	AUTO +[¥r]	AUTO -[¥r]	AUTO *[¥r]
LCD CDOT[¥r] “.”of ctcss is ON/OFF/FLASH ?	CDOT +[¥r]	CDOT -[¥r]	CDOT *[¥r]
LCD HZ[¥r] “HZ” of ctcss is ON/OFF/FLASH ?	HZ +[¥r]	HZ -[¥r]	HZ *[¥r]
LCD S[¥r] “S” of s-meter is ON/OFF/FLASH ?	S +[¥r]	S -[¥r]	S *[¥r]
LCD KLOC[¥r] “KEYLOC” symbol is ON/OFF/FLASH ?	KLOC +[¥r]	KLOC -[¥r]	KLOC *[¥r]
LCD ATT[¥r] “ATT”icon is ON/OFF/FLASH ?	ATT +[¥r]	ATT -[¥r]	ATT *[¥r]
LCD LINE[¥r] “LINE”icon is ON/OFF/FLASH ?	LINE +[¥r]	LINE -[¥r]	LINE *[¥r]
LCD ALT[¥r] “ALT”icon is ON/OFF/FLASH ?	ALT +[¥r]	ALT -[¥r]	ALT *[¥r]
LCD DATA[¥r] “DATA”icon is ON/OFF/FLASH ?	DATA +[¥r]	DATA -[¥r]	DATA *[¥r]

Controller → Radio	Radio → Controller(+:ON -:OFF *:FLASH)
LCD BAR[¥r] :By using this command, a user can check the lighting condition of the bar	ex) BAR +-++++*+++++++++++++----------[¥r]
LCD SMT[¥r] :By using this command, a user can check the signal strength meter	ex) SMT +++---[¥r]
LCD BNK[¥r] :By using this command, a user can check the selected bank No.	ex) BNK ++*+++++--[¥r] ON:1,2,4,5,6,7,8 OFF:9,10 FLASH:3
LCD CHN[¥r] :By using this command, a user can check the No. of the channel or the character of the CH indication part	ex) CHN [300][¥r] ,CHN [bn6][¥r] CHN [1-1][¥r]
LCD FRQ[¥r] :By using this command, a user can check the tuned frequency or the character of the FREQUENCY indication part	ex) FRQ [1300.0000][¥r]
LCD CTC[¥r] :By using this command, a user can check the CTCSS/DCS setting or the talk group ids	ex) CTC [123.0][¥r]
LCD LINE1[¥r]:By using this command, a user can check the character and the cursor of the 1'st dot matrix line	ex) LINE1 [25cm Amateur][_][¥r] character cursor position
LCD LINE2[¥r]:By using this command, a user can check the character and the cursor of the 2nd dot matrix line	ex) LINE2 [Uniden Group A][_][¥r] character cursor position
LCD[¥r] A user only sends this command to the scanner, and the scanner sends back all the above responses at once	

NOTE) All the above responses aren't influenced by the screen mask feature.

==

<COMMAND LL>

Confirm/Set lower edge frequency of CHAIN SEARCH.

==

Controller → Radio

① LL[¥r] :Confirm the lower edge frequency of the current search bank

LL #[¥r] :Confirm the lower edge frequency of the selected search bank.

#: Search Bank No. (A,B,....J)

② LL@@@@@@@@[¥r] :Set the lower edge frequency of the current search bank

LL@@@@@@@@ #[¥r] :Set the lower edge frequency of the selected search bank

@@@@@@@@ :Lower edge frequency

The order of the digits is from 1 GHz digit to100 Hz digit.

:Search Bank No. (A,B....J)

<Example>

LL08510125 A[¥r]

Set the lower edge frequency to "851.0125 MHz" for the search Bank "A".

Radio → Controller

① ② LL@@@@@@@@ #[¥r]

The current lower edge frequency is @@@@@@@@*100 Hz.

#: Search Bank No (A,B,.... J)

This command instructs the unit to set the lower edge frequency of chain search to @@@@@@@@*100 Hz or confirm frequency.

==

<COMMAND LM>

Confirm/Set LCD screen mask feature ON/OFF .

==

Controller → Radio

① LM[¥r] :Confirm LCD screen mask ON/OFF

② LMN[¥r] :Set LCD screen mask to ON

LMF[¥r] :Set LCD screen mask to OFF

Radio → Controller

① LMN[¥r] :LCD screen mask is ON

LMF[¥r] :LCD screen mask is OFF

② OK[¥r] :Command OK

===

<COMMAND LO>

Confirm/Set LOCKOUT function ON/OFF.

===

Controller → Radio

① LO[¥r] :Confirm LOCKOUT function ON/OFF

② LON[¥r] :Lockout ON

LOF[¥r] :Lockout OFF

Radio → Controller

① LON[¥r] :Lockout ON

LOF[¥r] :Lockout OFF

② OK[¥r]

This command instructs the unit to turn or confirm LOCKOUT function ON/OFF.

===

<COMMAND LT>

Confirm/Set Back Light HIGH/OFF/MEDIUM.

===

Controller → Radio

① LT[¥r] :Confirm Back Light HIGH/OFF/MEDIUM

② LTN[¥r] :Back Light HIGH

LTF[¥r] :Back Light OFF

LTD[¥r] :Back Light MEDIUM

Radio → Controller

① LTN[¥r] :Back Light HIGH

LTF[¥r] :Back Light OFF

LTD[¥r] :Back Light MEDIUM

② OK[¥r]

This command instructs the unit to turn or confirm Back Light HIGH/OFF/MEDIUM.

==

<COMMAND LU>

Confirm/Set upper edge frequency of CHAIN SEARCH.

==

Controller → Radio

① LU[¥r] :Confirm the upper edge frequency of the current search bank
LU #[¥r] :Confirm the upper edge frequency of the selected search bank
#: Search Bank No. (A,B,....J)

② LU@@@@@@@@[¥r] : set the upper edge frequency of the current search bank
LU@@@@@@@@ #[¥r] : set the upper edge frequency of the selected search bank

@@@@@@@@ :Upper edge frequency
The order of the digits is from 1 GHz digit
to 100 Hz digit.
:Search Bank No(A,B....J)

<Example>

LU09560000 A[¥r]
Set the upper edge frequency to "956.0000MHz"
for the search Bank "A".

Radio → Controller

① ② LU@@@@@@@@ #[¥r]
The current upper edge frequency is @@@@@@@@*100 Hz.
#:Search Bank No. (A,B,....J)

This command instructs the unit to set the upper edge frequency to
@@@@@@@@*100 Hz or confirm frequency.

==

<COMMAND MA>

Confirm the channel No. of MANUAL MODE or SCAN STOP MODE.

Move to the optional channel No. of MANUAL MODE.

==

Controller → Radio

① Confirm
MA[¥r]

② Move to
MA@@@[¥r] @@@ : channel No.

<Example>

MA015[¥r]   Move to the channel No. ″15″.

Radio → Controller

①,②

C@@@ F%%%%%%%% T# D# L# A# R# N$$$ [¥r]

@@@ :Channel No.

%%%%%%%% :Frequency

The order of the frequency digits are from 1 GHz digit to 100 Hz digit.

\# :N or F(ON/OFF)

ex) TN/TF :Trunking frequency / conventional frequency

DN/DF :Delay ON/OFF

LN/LF :Lockout ON/OFF

AN/AF :Attenuator ON/OFF

RN/RF :Auto record function ON/OFF

$$$:CTCSS/DCS TONE No. are listed in Table (following end of this chapter)

<Example>

C015 F04060125 TF DN LF AF N000[¥r]

The current channel No. is ″15″,
and its conventional frequency is ″406.0125 MHz″.
Delay function is ON, Lockout is OFF,
Attenuation is OFF
CTCSS is not programmed.

==

<COMMAND MD>

Confirm the Scanner mode.

==

Controller → Radio

MD[¥r]

Radio → Controller

MD@@[¥r]   @@ :Current scanner mode No.(See following Table)

This command instructs the unit to confirm the current scanner mode 。

>>>> Scanner Mode Number <<<<

00 :Scan mode
01 :Manual mode
02 :Limit Search mode
03 :Limit Search Hold mode
04 :Service Search mode
05 :Service Search Hold mode
06 :Auto Store mode
07 :Control Store mode (Not used)
08 :manual frequency mode
09 :ID search mode
10 :ID search hold mode
11 :ID scan mode
12 :ID manual mode
13 :Edacs ID search mode
14 :Edacs ID search hold mode
15 :Edacs ID scan mode
16 :Edacs ID manual mode
17 :LTR ID search mode
18 :LTR ID search hold mode
19 :LTR ID scan mode
20 :LTR ID manual mode

==

<COMMAND MU>

Confirm/Set status of speaker muting.

==

Controller → Radio

① MU[¥r] :Confirm MUTE control mode.

② MU?[¥r] :Confirm MUTE ON/OFF condition.

③ MUN[¥r] :Set MUTE ON(by force)mode.

MUF[¥r] :Set MUTE OFF(by force)mode.

MUA[¥r] :Set AUTO MUTE control mode.

Radio → Controller

① MUN[¥r] :MUTE ON(by force)mode.

MUF[¥r] :MUTE OFF(by force)mode.

MUA[¥r] :AUTO MUTE control mode.

② MU ON[¥r] :MUTE ON condition.

MU OFF[¥r] :MUTE OFF condition.

③ OK[¥r]

this command instructs the unit to set or confirm the status of speaker Muting.

==

<COMMAND PC>

Confirm/Set priority channel No. of a bank.

==

Controller → Radio

① Confirm

PC @[¥r] @ :Bank No.(A - J)

<Example>

PC A[¥r] Confirm the priority channel of "Bank A".

② Set

PC @%%%[¥r] @ :Bank No.(A-J) %%% :Channel No.(001 - 500)

<Example>

PC A014[¥r] Set the priority channel of "Bank A" to "14".

Radio → Controller

①,②

PC @%%%[¥r]　　@ :Bank No.(A - J)　%%% :Channel No. (001 - 500)

<Example>

PC A014[¥r]　The priority channel of "Bank A" is "14".

==

<COMMAND PI>

Confirm/Set Priority Talk ID Memory Location

==

Controller → Radio

① Confirm Priority ID location

PI @[¥r]　　@ : ID list No. (A-J)

<Example>

Confirm priority Location of List "A" in current Trunk Bank

PI A[¥r]

Set Priority ID location

②PI @#[¥r]　@ : ID List No. (A-J)　　# : ID location No. (1-9,0)

<Example>

PI A1[¥r] set priority to List "A", Location "1"

Radio → Controller

① PI @# %%%%%%[¥r]　　@　　: ID List No (A-J) # : ID location No. (1-9,0)

%%%%%%　: Talk Group ID

<Example>

PI A1 001234[¥r]

Priority of List "A" is location "1" ID:001234

② OK[¥r]

==

<COMMAND PM>

Read / Program a channel frequency

==

Controller → Radio

① Read

PM@@@[¥r]　　　@@@ : Channel No.(001-500)

<Example>

PM014[¥r]　　　Read the frequency of "14CH".

② Program

PM@@@ %%%%%%%%[¥r]　or　PM@@@T%%%%%%%%[¥r]

@@@ :Channel No.(001-500)　T: Trunking ch flag

%%%%%%%% :Frequency

The order of the frequency digits are from 1 GHz digit to 100 Hz digit.

PM command initialize delay mode, attenuator and auto record, because DL,AT and AR commands is commanded after commanding PM command.

If trunking ch flag is added, the frequency will be rounded by default step.

<Example 1> program 406.0125MHz to Channel No.14

PM014 04060125[¥r] Set the frequency of "14CH" to "406.0125 MHz".

<Example 2> program 29.0050MHz to Channel No.14

MA014[¥r]　　Move to channel No.14

ST 5K[¥r]　　Change program step

PM014 00290050[¥r]　Set the frequency of "14CH" to "29.0050 MHz".

Radio → Controller

①,②

C@@@ F%%%%%%%% T# D# L# A# R# N$$$ [¥r]

@@@　　:Channel No. (001-500)

%%%%%%%%　:Frequency

\# :N or F(ON/OFF)

ex)TN/TF : trunking / conventional frequency

DN/DF : Delay ON/OFF

LN/LF : Lockout ON/OFF

AN/AF : Attenuator ON/OFF

RN/RF : Auto record function ON/OFF

$$$:CTCSS/DCS TONE No. are listed in Table (following end of this chapter)

<Example>

C015 F04060125 TF DN LF AF RF N000[¥r]

CH No	:CH15	FREQUENCY	:"406.0125 MHz"(conventional)
DELAY	:ON	LOCKOUT	:OFF
ATTENUATOR	:OFF	CTCSS	:00.0 Hz.

==

<COMMAND PR>

Confirm/Set PRIORITY function ON/OFF .

==

Controller → Radio

① PR[¥r] :Confirm priority function ON/OFF

② PRN[¥r] :Set priority function

PRF[¥r] :Priority function OFF

Radio → Controller

① PRN[¥r] :Priority is ON

PRF[¥r] :Priority is OFF

② OK[¥r]

This command instructs the unit to turn or confirm PRIORITY function ON/OFF.

==

<COMMAND QU>

ON/OFF function which informs when squelch condition changes.

==

Controller → Radio

①QU[¥r]:Confirm QU command active

② QUN[¥r] :QU command ON

QUF[¥r] :QU command OFF

Radio → Controller

① QUN[¥r] :QU command is ON

QUF[¥r] :QU command is OFF

②OK[¥r]

While the function is ON, if the squelch condition becomes

・Close to open, unit sends +[¥r] to the controller.

・Open to close, unit sends -[¥r] to the controller.

This command instructs the unit to turn the function ON/OFF.
While the function is ON, the unit is monitoring the squelch condition
and informs when it changes.

===

<COMMAND RF>

Confirm/Tune the commanded frequency.

===

Controller → Radio

① RF@@@@@@@@[¥r] or RF@@@@@@@@?[¥r]
RF@@@@@@@@ $$$[¥r] or RF@@@@@@@@? $$$[¥r]

@@@@@@@@ : Tuned frequency
$$$(optional) : frequency round step
5K / 7.5K / 10K / 12.5K / 25K / 50K / 100K / AUTO

The order of the digits are from 1 GHz digit to 100 Hz digit.

<Example>

RF04060125[¥r] tuned receiver to 406.0125 MHz
RF00290050[¥r] tuned receiver to 29.0100MHz(rounded with default step)
RF00290050 5K[¥r] tuned receiver to 29.0050MHz(rounded with 5K step)

if you wish to confirm the tuned frequency for this command response,
a "?" code add after the commanded frequency.

② RF[¥r] :confirm tuned frequency

Radio → Controller

① OK[¥r] or RF@@@@@@@@[¥r]
② RF@@@@@@@@[¥r]

@@@@@@@@ : Tuned frequency

This command can be instantly tuned to a commanded frequency .

==

<COMMAND RG>

Confirm /Set EDACS ID Range mode.

==

Controller → Radio

① Confirm ID Range mode

RG[¥r]

② Set ID Range mode

RG @@@[¥r]   @@@ : EDACS id (Agency)

RG @@@@[¥r]   @@@@: EDACS id (Agency, Fleet)

<Example>

RG 01-[¥r] or RG 01-01[¥r]

③ Clear ID Range mode

RGF [¥r]

Radio → Controller

① RGN[¥r]   :Range mode ON

RGF[¥r]   :Range mode OFF

② OK[¥r]

③ OK[¥r]

==

<COMMAND RI>

ON/OFF function which informs when priority receiving condition changes.

==

Controller → Radio

① RI[¥r]   :Confirm "RI" command active

② RIN[¥r]   :Activate "RI" command

RIF[¥r]   :Inactivate "RI" command

Radio → Controller

① RIN[¥r]   :"RI" command is ACTIVE

RIF[¥r]   :"RI" command is INACTIVE

② OK[¥r]

While the function is ON,

・if the unit stops on the priority channel by priority receiving, sends PST[¥r] to the controller.
・if the unit returns from the priority channel, sends PRT[¥r] to the controller.

This command instructs the unit to turn the function ON/OFF.
While the function is ON, the unit is monitoring the priority receiving condition and informs when it changes.

==

<COMMAND RM>
Confirm/Set Receiver modulation .

==

Controller → Radio
① RM[¥r] :Confirm Receiver modulation
② RM @@@[¥r] :Set Receiver modulation
@@@ : Receiver modulation
ex)RM AM[¥r] AM RM NFM[¥r] Narrow band FM
RM WFM[¥r] Wide band FM RM FM[¥r] FM
RM AUTO[¥r] Set Default modulation

Radio → Controller
①RM @@@[¥r] @@@:Current Receiver modulation
ex)RM AM[¥r] AM RM NFM[¥r] Narrow band FM
RM WFM[¥r] Wide band FM RM FM[¥r] FM
RM ---[¥r] Not programmed frequency(0MHz)
② OK[¥r]
This command instructs the unit to confirm receiver modulation.

==

<COMMAND SB>
Confirm/Select scan banks.

==

Controller → Radio
①SB[¥r] :Confirm scan banks
② SB @%○・・・[¥r] :Select scan banks
@,%,○,・・・ :bank name

<Example>
SB ACEGI[¥r]
Select "BANK A, C, E, G, I".

Radio → Controller

①､② SB @%○･･･[¥r] @,%,○,･･･ :bank name

<Example>

SB ACEGI[¥r] Selected scan banks are "BANK A, C, E, G, I".

This command instructs the unit to make designated scan banks be selected.

===

<COMMAND SG>

Read the signal strength

===

Controller → Radio

① SG[¥r] :Confirm signal strength

Radio -> Controller

①S$$$ F########[¥r] $$$:A/D voltage value of Strength meter(0-255)
########:tuned frequency

<Example>

S147 F08510125[¥r]

Note)

Voltage = (MicomVcc * $$$)/255 ex) Vcc:3.2V $$$=147 (3.2 * 147)/255 =1.84V

===

<COMMAND SI>

Confirm Scanner Information

===

Controller → Radio

SI[¥r]

Radio → Controller

SI @@@@@@@@,%%%%%%%%%%,&&&[¥r]

@@@@@@@@ :Alphanumeric model Name/No.
%%%%%%%%%% :Alphanumeric ESN No.
&&& :Remote Command Version.

<Example>

SI BC780XLT,1000000001,103

This is the information string sent by the scanner to PC

==

<COMMAND SQ>

Confirm squelch condition.

==

Controller → Radio

SQ[¥r]

Radio → Controller

+[¥r]　:Now squelch is OPEN.

-[¥r]　:Now squelch is CLOSE.

This command instructs the unit to send whether the squelch is OPEN or CLOSE.

==

<COMMAND SS>

Read a frequency in search skip memory.

Register a frequency into search skip memory.

==

Controller → Radio

① Read

SS###　### : Search Skip Memory No. (001-200)

② Register

SS@@@@@@@@[¥r]　@@@@@@@@ : Frequency

The order of the digits are from 1 GHz digit to 100 Hz digit.

<Example>

SS04060125[¥r]　Register 406.0125 MHz into search skip memory.

Radio → Controller

① Read

SS@@@@@@@@[¥r]　@@@@@@@@ : Frequency

<Example>

SS04060125[¥r]

Frequencies in search skip memory are "406.0125 MHz"

② Register

SS@@@@@@@@[¥r]　@@@@@@@@ : Frequency

<Example>

SS04060125[¥r] 406.0125 MHz is registered.

※ If the frequency is already in search skip memory,
the unit sends ON[¥r] to the controller.

This command instructs the unit

①to send all the frequencies in search skip memory.

②to register a frequency into search skip memory.

==

<COMMAND ST>

Confirm / set frequency step

==

Controller → Radio

① ST[¥r]   :Confirm frequency step

② ST ###[¥r]   :Set frequency step

###: 5K / 12.5K / 25K / 50K / 10K / 100K / 7.5K / AUTO

Radio → Controller

① ST ###[¥r]   :Inform frequency step

###: 5K / 12.5K / 25K / 50K / 10K / 100K / 7.5K

② OK[¥r]

==

<COMMAND TA>

Confirm / Program alpha tag name

==

Controller → Radio

① Confirm alpha tag name

TA C ###[¥r]   :Confirm channel tag name

:Channel No.(001 - 500)

TA B $[¥r]   :Confirm bank tag name

$:Bank No.(A - J)

TA L $ &[¥r]   :Confirm ID LIST tag name

$:Bank No.(A - J) &:list No.(A - J)

TA I $ &%[¥r]   :Confirm TALK ID tag name

$:Bank No.(A - J) &:list No.(A - J)

% :Location No.(0 - 9)

TA S $[¥r]   :Confirm Search Bank tag name

$: search bank No.(A - J)

② Program alpha tag name

TA C ### @@@@@@@@@@@@@@@@[¥r] :Program channel tag name
:Channel No.(001 - 500)
@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA B $ @@@@@@@@@@@@@@@@[¥r] :Program bank tag name
$:Bank No.(A - J)
@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA L $ & @@@@@@@@@@@@@@@@[¥r] :Program ID LIST tag name
$:Bank No.(A - J) &:list No.(A - J)
@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA I $ &% @@@@@@@@@@@@@@@@[¥r] :Program TALK ID tag name
$:Bank No.(A - J) &:List No.(A - J)
% :Location No.(0 - 9)
@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA S $ @@@@@@@@@@@@@@@@[¥r] : Program Search Bank tag name
$:Search bank No.(A - J)
@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

③ Clear alpha tag name

TA C ### [¥r] :Clear channel tag name
:Channel No.(001 - 500)

TA B $ [¥r] :Program bank tag name
$:Bank No.(A - J)

TA L $ & [¥r] :Clear ID LIST tag name
$:Bank No.(A - J) &:list No.(A - J)

TA I $ &% [¥r] :Clear TALK ID tag name
$:Bank No.(A - J) &:List No.(A - J)
% :Location No.(0 - 9)

TA S $ [¥r] : Clear Search Bank tag name
$:Search bank No.(A - J)

Radio → Controller

① Informs alpha tag name

TA C ### @@@@@@@@@@@@@@@@[¥r] :Program channel tag name
:Channel No.(001 - 500)
@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA B $ @@@@@@@@@@@@@@@@[¥r] :Program bank tag name

$:Bank No.(A - J)

@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA L $ & @@@@@@@@@@@@@@@@[¥r] :Program ID LIST tag name

$:Bank No.(A - J) & :List No.(A - J)

@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA I $ &% @@@@@@@@@@@@@@@@[¥r] :Program TALK ID tag name

$:Bank No.(A - J) &:List No.(A - J)

% :Location No.(0 - 9)

@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

TA S $ @@@@@@@@@@@@@@@@[¥r] :Program Search Bank tag name

$:Search bank No.(A - J)

@@@@@@@@@@@@@@@@ :Alpha tag name (Max. 16igit)

②③OK[¥r]

==

<COMMAND TB>

Confirm Active Trunking bank

==

Controller → Radio

TB[¥r]

Radio → Controller

TB # @@@@@[¥r]

:Active/Optional Trunking Bank

@@@@@ :Trunking Type

E2-800(Motorola Type2 800MHz)

E2-900(Motorola Type2 900MHz)

E2-VHI(Motorola Type2 VHI)

E2-UHF(Motorola Type2 UHF)

TYPE1 (Motorola Type1)

EDCS WIDE (WIDE BAND EDACS)

EDCS NARROW (NARROW BAND EDACS)

LT (LTR)

<Example> TB A E2-800[¥r]

Active Bank: "A" Trunk Type: MOTOROLA TYPE2 800MHz

==

<COMMAND TC>

Confirm/Set Trunking with "CONTROL CH ONLY MODE" ON/OFF.

==

Controller → Radio

① Confirm "CONTROL CH ONLY MODE" is ON or OFF

TC @[¥r]   @ :Bank No.

② Set "CONTROL CH ONLY MODE" to ON or OFF

TCN @ ##[¥r]   :Set "CONTROL CH ONLY MODE" to ON

@ :Bank No.

:CH assignment plan(optional) P1,P2,P3,P4

P1: Plan1 P2: Plan2 P3: Plan3 P4: Plan4

<Example>

TCN A P1[¥r]

TCF @[¥r]   : set "CONTROL CH ONLY MODE" to OFF

Radio → Controller

① TCN @ ##[¥r]   :CONTROL CH ONLY MODE" is ON

@ :Bank No.

:CH assignment plan(optional) P1,P2,P3,P4

P1: Plan1 P2: Plan2 P3: Plan3 P4: Plan4

<Example> TCN A P1[¥r] or TCN A[¥r]

TCF @[¥r]CONTROL CH ONLY MODE" is OFF

② OK[¥r]

==

<COMMAND TD>

Confirm/Set Tone Detection function ON/OFF .

==

Controller → Radio

① TD[¥r] :Confirm Tone Detection function ON/OFF
TDN[¥r] :Tone Detection function ON
TDF[¥r] :Tone Detection function OFF

Radio → Controller

① TDN[¥r] :Tone Detection function ON
TDF[¥r] :Tone Detection function OFF
② OK[¥r]

This command instructs the unit to turn or confirm Tone Detection function ON/OFF.

==

<COMMAND TG>

Program Talk Group ID

==

Controller → Radio

① TG ? @%[¥r] :Confirm Programmed Talk Group IDs
? :Bank No.(A-J)
@% :ID Memory No.

② Program Talk Group IDs

//// **MOTOROLA TYPE1** ////

TG ? @% &##-$$[¥r] or TG ? @% &###-$[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
&##-$$: Type1 ID
& :Block No.(0-9)
or ### :Fleet No.
$$:Sub fleet No.

<Example>

TG A A0 001-05[¥r] ID in ID memory "BANK A-A10" is "BLOCK=0, FLEET=1, SUBFLEET=5".

>> PROGRAM MOTOROLA TYPE1 I-CALL ID <<

TG ? @% i#####[¥r]

? : Bank No.(A-J)

@% :ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i##### :I-CALL ID

<Example>

TG A A0 i01234[¥r] ID in ID memory "BANK A-A10" is "i01234".

>> PROGRAM MOTOROLA TYPE1 ALL I-CALL ID <<

TG ? @% i0[¥r]

? : Bank No.(A-J)

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i0 : ALL I-CALL ID Indication

//// **MOTOROLA TYPE 2** ////

TG ? @% ######[¥r]

? : Bank No.(A-J)

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

: Type2 ID

<Example>

TG A A0 001234[¥r] ID in ID memory "BANK A-A10" is "1234".

>> PROGRAM MOTOROLA TYPE2 I-CALL ID <<

TG ? @% 7#####[¥r]

? : Bank No.(A-J)

@% :ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

7##### :I-CALL ID

<Example>

TG A A0 701234[¥r] ID in ID memory "BANK A-A10" is "701234".

>> PROGRAM MOTOROLA TYPE2 ALL I-CALL ID <<

TG ? @% 700000 or TG ? @% i0[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
700000 /i0 : ALL I-CALL ID Indication

//// LTR ////
TG ? @% %$$###[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
%$$### : LTR Talk Group ID
% :Area code(0,1)
$$:Home Repeater No. (01-20)
:ID(000-254)
<Example>
TG A A0 001064[¥r]
ID in ID memory "BANK A-A10" is "Area code:0 Home Repeater No.:01 ID:64"

//// EDACS ////

TG ? @% &&-##$[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
&&-##$: Edacs Talk Group ID
&& :Agency No. ## :Fleet No. $:SUBFLEET No.
<Example>
TG A A0 01-025[¥r] AFS format
TG A A0 000149[¥r] DECIMAL format
ID in ID memory "BANK A-A10" is "AGENCY=01, FLEET=02, SUBFLEET=5"

>> PROGRAM EDACS PARTIAL ID <<
TG ? @% &&-[¥r] or TG ? @% &&-##[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
&&-: Edacs Partial Talk Group ID(All Agency)
&&-##: Edacs Partial Talk Group ID(All Agency-Fleet)
&& :Agency No. ## :Fleet No.
<Example>

TG A A0 01-[¥r]
TG A A0 01-02[¥r]

>> PROGRAM EDACS I-CALL ID <<

TG ? @% i#####[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
i##### :I-CALL ID
<Example>
TG A A0 i01234[¥r] ID in ID memory "BANK A-A10" is "i01234".

>> PROGRAM EDACS ALL I-CALL ID <<

TG ? @% i0[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
i0 : ALL I-CALL ID Indication

Radio → Controller
①
//// **MOTOROLA TYPE1** ////
TG ? @% &##-$$[¥r] or TG ? @% &###-$[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J) % :ID Location (1-9,0)
&##-$$: Type1 ID
& :Block No.(0-9)
or ### :Fleet No.
$$:Sub fleet No.
<Example>
TG A A0 001-05[¥r] ID in ID memory "BANK A-A10" is
"BLOCK=0, FLEET=1, SUBFLEET=5".

>> MOTOROLA TYPE1 I-CALL ID <<
TG ? @% i#####[¥r]
? : Bank No.(A-J)
@% :ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i##### :I-CALL ID

<Example>

TG A A0 i01234[¥r] ID in ID memory "BANK A-A10" is "i01234".

>> MOTOROLA TYPE1 ALL I-CALL ID <<

TG ? @% i00000[¥r]

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

i00000 : ALL I-CALL ID Indication

//// **MOTOROLA TYPE 2** ////

TG ? @% ######[¥r]

? : Bank No.(A-J)

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

: Type2 ID

<Example>

TG A A0 001234[¥r] ID in ID memory "BANK A-A10" is "1234".

>> MOTOROLA TYPE2 I-CALL ID <<

TG ? @% 7#####[¥r]

? : Bank No.(A-J)

@% :ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

7##### :I-CALL ID

<Example>

TG A A0 701234[¥r] ID in ID memory "BANK A-A10" is "701234".

>> MOTOROLA TYPE2 ALL I-CALL ID <<

TG ? @% 700000[¥r]

? : Bank No.(A-J)

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

700000 : ALL I-CALL ID Indication

//// **LTR** ////

TG ? @% %$$###[¥r]

? : Bank No.(A-J)

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

%$$### : LTR Talk Group ID

% :Area code(0,1)

$$:Home Repeater No. (01-20)

:ID(000-254)

<Example>

TG A A0 001064[¥r]

ID in ID memory "BANK A-A10" is "Area code:0 Home Repeater No.:01 ID:64"

//// **EDACS** ////

TG ? @% &&-##$[¥r]

? : Bank No.(A-J)

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

&&-##$: Edacs Talk Group ID

&& :Agency No. ## :Fleet No. $:SUBFLEET No.

<Example>

TG A A0 01-025[¥r] AFS format

TG A A0 000149[¥r] DECIMAL format

ID in ID memory "BANK A-A10" is "AGENCY=01, FLEET=02, SUBFLEET=5"

>> EDACS PARTIAL ID <<

TG ? @% &&----[¥r] or TG ? @% &&-##-[¥r]

? : Bank No.(A-J)

@% : ID Memory No.

@ :ID Scan List (A-J) % :ID Location (1-9,0)

&&----: Edacs Partial Talk Group ID(All Agency)

&&-##-: Edacs Partial Talk Group ID(All Agency-Fleet)

&& :Agency No. ## :Fleet No.

<Example>

TG A A0 01----[¥r]

TG A A0 01-02-[¥r]

>> EDACS I-CALL ID <<

TG ? @% i#####[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J)   % :ID Location (1-9,0)
i##### :I-CALL ID
<Example>
TG A A0 i01234[¥r] ID in ID memory "BANK A-A10" is "i01234".

>> EDACS ALL I-CALL ID <<
TG ? @% i00000[¥r]
? : Bank No.(A-J)
@% : ID Memory No.
@ :ID Scan List (A-J)   % :ID Location (1-9,0)
i00000 : ALL I-CALL ID Indication

② OK[¥r]

==

<COMMAND TR>
Set Trunking on a bank of channels.

==

Controller → Radio
TR & # %%%%%%% $$$$??? X[¥r]
& : A-J For bank selection.
: 1,2,3,4,5,6,7 Trunking type.
1:Type1, 2:Type2-800, 3:Type2-900, 4:Type2-UHF,
5:Type2-VHF 6:WIDE BAND EDACS 7:NARROW BAND EDACS 8:LTR
%%%%%%%
Base frequency (Motorola UHF/VHF band only).
$$$$
Spacing (Motorola UHF/VHF band only)
The multiple of 5.0 kHz: 0050*n(1-20)
The multiple of 12.5 kHz: 0125*n(1-8)
The multiple of 7.5 kHz 0075*n(1-13)
??? (option)
Offset Channel(Motorola UHF/VHF band only)
380～759
X (option)
Base Configuration No.
1 or 2 or 3

Radio → Controller

OK[¥r]

==

<COMMAND VR>

Confirm the version of the Product.

==

Controller → Radio

VR[¥r]

Radio → Controller

VR@ .@@[¥r]   @ .@@ : The version of the Product

<Example>

VR1.01[¥r]   The version of the Product is 1.01

Note)This value is not the version No. of the software.

==

<COMMAND WA>

ON/OFF function which informs when the alert message receives.

==

Controller → Radio

① WA[¥r]   :Confirm WA command active

② WAN[¥r]   :WA command is ON, and WX alert ON

WAF[¥r] :WA command OFF, and Wx alert OFF

Radio → Controller

① WAN[¥r]   :WA command is ON

WAF[¥r] :WA command is OFF

② OK[¥r]   : Command OK

While the function is ON, when detect the same or wx alert,

the unit sends the alert message to the controller:

===

<COMMAND WI>

Read the window voltage.

===

Controller → Radio

WI[¥r]

Radio → Controller

W@@@ F%%%%%%%%[¥r] @@@ :Window voltage

%%%%%%%% :Frequency

Window voltage ranges from a minimum value of "000" to a maximum value of "255".
The order of the frequency digits are from 1 GHz digit to 100 Hz digit.

<Example>

W155 F04060125[¥r] Window voltage is "155", and its frequency is "406.0125 MHz".

This command instructs the unit to send the current window voltage and its frequency.

CTCSS/DCS No.Table

No.

000/ CTCSS/DCS not programmed

No.	No.	No.	No.
001/ CTCSS: 67.0	011/ CTCSS: 97.4	021/ CTCSS: 136.5	031/ CTCSS: 192.8
002/ CTCSS: 71.9	012/ CTCSS: 100.0	022/ CTCSS: 141.3	032/ CTCSS: 203.5
003/ CTCSS: 74.4	013/ CTCSS: 103.5	023/ CTCSS: 146.2	033/ CTCSS: 210.7
004/ CTCSS: 77.0	014/ CTCSS: 107.2	024/ CTCSS: 151.4	034/ CTCSS: 218.1
005/ CTCSS: 79.7	015/ CTCSS: 110.9	025/ CTCSS: 156.7	035/ CTCSS: 225.7
006/ CTCSS: 82.5	016/ CTCSS: 114.8	026/ CTCSS: 162.2	036/ CTCSS: 233.6
007/ CTCSS: 85.4	017/ CTCSS: 118.8	027/ CTCSS: 167.9	037/ CTCSS: 241.8
008/ CTCSS: 88.5	018/ CTCSS: 123.0	028/ CTCSS: 173.8	038/ CTCSS: 250.3
009/ CTCSS: 91.5	019/ CTCSS: 127.3	029/ CTCSS: 179.9	
010/ CTCSS: 94.8	020/ CTCSS: 131.8	030/ CTCSS: 186.2	

No.	No.	No.	No.
039/ DCS: 23	049/ DCS: 54	059/ DCS: 125	069/ DCS: 165
040/ DCS: 25	050/ DCS: 65	060/ DCS: 131	070/ DCS: 172
041/ DCS: 26	051/ DCS: 71	061/ DCS: 132	071/ DCS: 174
042/ DCS: 31	052/ DCS: 72	062/ DCS: 134	072/ DCS: 205
043/ DCS: 32	053/ DCS: 73	063/ DCS: 143	073/ DCS: 212
044/ DCS: 36	054/ DCS: 74	064/ DCS: 145	074/ DCS: 223
045/ DCS: 43	055/ DCS: 114	065/ DCS: 152	075/ DCS: 225
046/ DCS: 47	056/ DCS: 115	066/ DCS: 155	076/ DCS: 226
047/ DCS: 51	057/ DCS: 116	067/ DCS: 156	077/ DCS: 243
048/ DCS: 53	058/ DCS: 122	068/ DCS: 162	078/ DCS: 244

No.	No.	No.	No.
079/ DCS: 245	089/ DCS: 274	099/ DCS: 356	109/ DCS: 445
080/ DCS: 246	090/ DCS: 306	100/ DCS: 364	110/ DCS: 446
081/ DCS: 251	091/ DCS: 311	101/ DCS: 365	111/ DCS: 452
082/ DCS: 252	092/ DCS: 315	102/ DCS: 371	112/ DCS: 454
083/ DCS: 255	093/ DCS: 325	103/ DCS: 411	113/ DCS: 455
084/ DCS: 261	094/ DCS: 331	104/ DCS: 412	114/ DCS: 462
085/ DCS: 263	095/ DCS: 332	105/ DCS: 413	115/ DCS: 464
086/ DCS: 265	096/ DCS: 343	106/ DCS: 423	116/ DCS: 465
087/ DCS: 266	097/ DCS: 346	107/ DCS: 431	117/ DCS: 466
088/ DCS: 271	098/ DCS: 351	108/ DCS: 432	118/ DCS: 503

No.	No.	No.	.
119/ DCS: 506	129/ DCS: 627	139/ DCS: 732	
120/ DCS: 516	130/ DCS: 631	140/ DCS: 734	
121/ DCS: 523	131/ DCS: 632	141/ DCS: 743	
122/ DCS: 526	132/ DCS: 654	142/ DCS: 754	
123/ DCS: 532	133/ DCS: 662		
124/ DCS: 546	134/ DCS: 664		
125/ DCS: 565	135/ DCS: 703		
126/ DCS: 606	136/ DCS: 712		
127/ DCS: 612	137/ DCS: 723		
128/ DCS: 624	138/ DCS: 731		